



2013 WATER QUALITY REPORT

Rockford Water Division

"In this country we expect and demand safe drinking water. The City of Rockford takes pride in our achievements in improving water quality and clarity."

*- Lawrence J. Morrissey,
Mayor of the City of Rockford*

Excellence Everywhere

The Rockford Water Division is pleased to provide you this Water Quality Report.

Why did you receive this report?

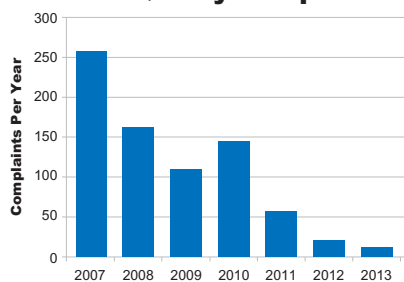
The Rockford Water Division is pleased to provide this Water Quality Report. Much of the information it contains is required by the Illinois and U.S. Environmental Protection Agency. Thus, the focus of this report is Rockford's compliance with drinking water standards. Information of general interest to water customers is also included.

Water Quality Improvements

The filtration plants built as part of the Water System Improvement Project continue to operate to remove iron from the City's drinking water. Iron is a mineral present in all groundwater and, if it comes in contact with air, it oxidizes resulting in reddish brown water at your tap. As a result of the City's new filtration plants, customers are provided with clear tap water. The plants are able to remove ten times more oxidized iron than before. 2013 marked the first full year that all of the treatment facilities built as part of the Water System Improvement Project were complete and in service. The improvements of the City's water quality are

evident by the fact that customer calls continue to decrease. Calls for water quality concerns have decreased by 96% since 2007.

Water Quality Complaints



Source Water

The sources of Rockford's groundwater are the shallow sand and gravel aquifer and deep bedrock aquifer. The Illinois EPA considers the source water of Rockford's water supply to be subject to contamination. This determination is based on a number of criteria including:

- Monitoring conducted at wells.
- Monitoring conducted at the entry point to the distribution system.
- Available hydrogeologic data of the wells.
- Land-use activities in the recharge area of the wells.

A Source Water Assessment Summary is available upon request. Be a good steward and help protect our ground water. Refer to our website (<http://rockfordil.gov/public-works/water-division/water-quality.aspx>) for our Groundwater Protection informational bulletins.

Well 37 Treatment Facility

The City of Rockford has completed the construction of a \$1.8 million dollar treatment plant at Well 37 located at 2100 Huffman Blvd. The treatment plant uses granular activated carbon filters and

operates to remove low level organics from the source water. Historically, the level of volatile organics in the source water



Well 37 - 2100 Huffman Boulevard

at Well 37 has never exceeded the EPA Drinking Water Maximum Contaminant Level (MCL) of 5 parts per billion. In recent years, the level of organics was approaching ½ the MCL, or 2.5 parts per billion. As a result, it was decided to install treatment at this site that would completely remove all volatile organics from the source water. Since the well site has been operational with this new filtration system, analytical data has verified that 100% of the volatiles have been successfully removed from the source water in the area.

Water Information Sources

City of Rockford

<http://www.rockfordil.gov>

Illinois Environmental
Protection Agency

<http://www.epa.state.il.us>

Illinois Department
of Public Health

<http://www.idph.state.il.us>

**As of 3/31/12, Rockford's drinking water
was in full compliance with
IEPA and US EPA regulations.**



2013 Water Quality Data: Detected Contaminants

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive	0.8		0	No	Naturally present in the environment

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

Lead & Copper

Lead And Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	Number of Sites Over AL	Violation	Likely Source of Contamination
Copper	07/17/2013	1.3	1.3 ppm	1.2 ppm	3	No	Erosion of natural deposits; Leaching from wood preservatives Corrosion of household plumbing systems.
Lead	07/17/2013	0 ppm	15 ppb	12 ppb	1	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
HAA5 [Total Haloaceticacids]		7	0 - 3	No goal for the total	80	ppb	No	By-product of drinking water disinfection
THMs [Total Trihalomethanes]		32	.074 - 23	No goal for the total	80	ppb	No	By-product of drinking water disinfection
Chlorine	12/31/2013	1	0.4726 - 0.6041	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic		8.9	0 - 8.9	0	10	ppm	No	Erosion of natural deposits; Runoff from orchards Runoff from glass and electronics production wastes.
Barium		0.18	0.07 - 0.18	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride		1.03	0.90 - 1.03	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (As N)		4	0 - 4.1	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium		19	4.4 - 19			ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Zinc		0.047	0 - 0.047	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon Emitters	01/13/2006	7.8	7.8 - 7.8	0	4	mrem/yr	No	Decay of natural and man-made deposits
Beta/Photon Emitters	01/13/2006	7.8	7.8 - 7.8	0	50	mrem/yr	No	Decay of natural and man-made deposits
Radium 226		2.2	0.4 - 2.2	0	5	pCi/L	Yes	Erosion of natural deposits
Radium 228		2.43	0 - 2.4	0	5	pCi/L	Yes	Erosion of natural deposits
Combined Radium 226/228		4	0.7 - 4.3	0	5	pCi/L	Yes	Erosion of natural deposits
Gross Alpha Excluding Radon and Uranium		3	0 - 3.3	0	15	pCi/L	No	Erosion of natural deposits
Uranium	07/09/2010	4.321	4.321 - 4.321	0	30	ug/l	No	Erosion of natural deposits
Volatile Organic Contaminates	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Tetrachloroethylene		2.3	0 - 2.3	0	5	ppb	No	Discharge from factories and dry cleaners
1, 1, 1-Trichloroethane		3.5	0 - 3.5	200	200	ppb	No	Discharge from metal degreasing sites and other factories
Trichloroethylene		1	0 - 1.5	0	5	ppb	No	Discharge from metal degreasing sites and other factories
cis-1,2-Dichloroethylene		8	0 - 8	70	70	ppb	No	Discharge from industrial chemical factories
State Regulated Contaminants	Date	Detected	Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Iron		1.7	0 - 2.3	N/A	1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese		480	0 - 540	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.

Notes For Charts:

Highest Level Detected indicates the annual running average of the analyte listed.

NOTE: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

EPA has reviewed the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

Definitions of Terms & Abbreviations Used in the Table

MCLG: Maximum Contamination Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL: Maximum Contamination Level, or the highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.

AL: Action Level, or the concentration of the contaminant which when exceeded, triggers treatment or other requirements which a water system must follow.

n/a: Not applicable.

ppm: Parts per million or milligrams per liter or one ounce in 7,350 gallons of water.

ppb: Parts per billion or micrograms per liter or one ounce in 7,350,000 gallons of water.

pCi/l: Picocuries per liter, used to measure radioactivity.

MRDL: Maximum Residual Disinfectant Level, or the highest level of disinfectant allowed in drinking water.

MRDLG: Maximum Residual Disinfectant Level Goal, or the level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Information About Inorganic Contaminants

Iron: This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult your physician about this level of sodium in the water.

The Rockford Water Division is pleased to provide you this Water Quality Report.

If, upon its review, you should have questions or concerns, please contact Nadine Miller, Water Quality Supervisor (1-815-987-5713). For other information and updates to activities at the Water Division, please visit our web site at www.rockfordil.gov.

Source of Drinking Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Water travels over the surface of the land or through the ground. It dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants:** includes viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** includes salts and metals which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** these come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants:** includes synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants:** can be naturally-occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Unidirectional Hydrant Flushing

Each spring, the Rockford Water Division conducts an annual unidirectional flushing program. This annual maintenance program runs Monday through Thursday (weather permitting) from April through October. The hydrant flushing program removes the normal mineral build-up from the pipes that deliver water to our customers.

Neighborhoods will be notified when we will be in their area by use of the Non-Emergency Notification System. Customers who currently have a listed telephone number will be contacted. If you have an unlisted number or would rather be notified via cell phone or email, you may register at <http://wincoil.us/rockfordwater>. Notifications are also posted on the City of Rockfords web site (<http://rockfordil.gov/public-works/water-division/hydrant-flushing.aspx>).

Water is safe during flushing, but customers may notice discoloration or sediment at the water tap. Customers are advised not to use hot water until the water has cleared.



Need help?

Service Problems, Leaks, etc.

Customer Service Center 815-987-5700

Water Quality

Water Production 815-987-5736

Billing Problems

Customer Service Center 815-987-5700

After Hours Emergencies

Public Works 815-987-5712



We invite public comment about water issues. Find out more about the Rockford Water Division on the Internet at www.rockfordil.gov or contact Water Quality at (815)-987-5736 or (815)-987-5701.

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.